

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 2, 10, 11, 13, 14, 17, 21, and 22 in accordance with the following:

1. (currently amended) A phosphor comprising a perovskite structure which includes sulfur and satisfies the following relation:



where M is an alkaline earth metal and A is a rare earth element.

2. (currently amended) The phosphor of claim 1, wherein the alkaline earth metal is an element selected from the group consisting of magnesium (Mg), strontium (Sr), calcium (Ca), and barium (Ba).

3. (original) The phosphor of claim 1, wherein the rare earth element is an element selected from the group consisting of cerium (Ce), praseodymium (Pr), europium (Eu), terbium (Tb), and thulium (Tm).

4. (original) The phosphor of claim 1, wherein the rare earth element added to the phosphor is in a range of 0.05 - 5 mol % based on 1 mol of Ti.

5. (original) The phosphor of claim 1, further comprising a Group 13 element of the periodic table.

6. (original) The phosphor of claim 5, wherein the Group 13 element added to the phosphor is in a range of 0.05 – 80 mol % based on 1 mol of Ti.
7. (original) The phosphor of claim 5, wherein the phosphor is one of $\text{SrTiO}_3\text{:Pr,Al}$ which includes the sulfur and $\text{SrTiO}_3\text{:Pr,Ga}$ which includes the sulfur.
8. (original) The phosphor of claim 5, wherein the Group 13 element is one selected from the group consisting of aluminum (Al), gallium (Ga), indium (In), and thallium (Tl).
9. (original) The phosphor of claim 8, wherein the Group 13 element added to the phosphor is in the range of 0.05 - 80 mol % based on 1 mol of Ti.
10. (currently amended) The phosphor of claim 1, wherein the sulfur contained in the phosphor is added in a form of a sulfur element or an alkaline metal ~~sulfates~~sulfur-containing compound.
11. (currently amended) The phosphor of claim 10, wherein the alkaline metal sulfate sulfur-containing compound is one of: $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$ ~~or~~ and Na_2SO_4 .
12. (original) The phosphor of claim 1, wherein the sulfur contained in the phosphor is in the range of 0.1 – 10 wt % based on a total weight of the phosphor.
13. (currently amended) The phosphor of claim 1, wherein the alkaline earth metal is an element selected from the group consisting of Mg,

Sr, Ca, and Ba, and

the rare earth element is an element selected from the group consisting of Ce, Pr, Eu, Tb, and Tm.

14. (currently amended) The phosphor of claim 13, wherein the sulfur contained in the phosphor is added in a form of a sulfur element or an alkaline metal ~~sulfate~~ sulfur-containing compound.

15. (original) The phosphor of claim 14, wherein the rare earth element added to the phosphor is in a range of 0.05 – 5 mol % based on 1 mol of Ti.

16. (original) The phosphor of claim 15, wherein the sulfur contained in the phosphor is in a range of 0.1 – 10 wt % based on a total weight of the phosphor.

17. (currently amended) The phosphor of claim 15, wherein the alkaline metal ~~sulfate~~ sulfur-containing compound is $\text{Na}_2\text{S}_2\text{O}_3 \cdot 5\text{H}_2\text{O}$ or Na_2SO_4 .

18. (original) The phosphor of claim 17, further comprising a Group 13 element selected from the group consisting of Al, Ga, In, and Tl.

19. (original) The phosphor of claim 18, wherein the Group 13 element added to the phosphor is in a range of 0.05 – 80 mol % based on 1 mol of Ti.

20. (original) The phosphor of claim 19, wherein the phosphor is one of $\text{SrTiO}_3\text{:Pr,Al}$ which includes the sulfur and $\text{SrTiO}_3\text{:Pr,Ga}$ which includes the sulfur.

21. (currently amended) A phosphor with a host matrix having a perovskite structure which includes sulfur, an alkaline earth metal and a rare earth element, wherein sulfur atoms partially substitutes oxygen atoms so as to vary lattice parameters of the phosphor.

22. (currently amended) A fluorescent display device comprising ~~the phosphor of claim 4~~ a phosphor comprising a perovskite structure which includes sulfur and satisfies the following relation:



where M is an alkaline earth metal and A is a rare earth element.

23. (original) The fluorescent display device of claim 22, wherein the fluorescent display device is one of a field emission display and a vacuum fluorescent display.